

amended claim language, applicants now present a formal attestation and affirmation of their legal position and substantive rights: Applicant does not now surrender for any reason, nor has previously surrendered at any time or for any reason during the prosecution of the instant application, any inventive subject matter which is or could be expected to be a particular equivalent of the invention defined by the language of the amended claims then pending by a person ordinarily skilled in this art; and that no presumption of estoppel, either in law or equity, exists or pertains now or at any time previously as a potential bar to the application of the doctrine of equivalence for any and all possible embodiments which may be found to be encompassed now or in the future by the language of the amended claims proffered now or at any time previously for examination to the U.S. Patent Office. Accordingly, applicant affirmatively rebuts and explicitly disputes any presumption that the doctrine of equivalence for the language of the amended claims has been surrendered or is not in full force for any reason and at any time during the prosecution for any and all amended claims prosecuted for the instant application.

Accordingly, the language of currently amended claims 1, 11-14, and 15 respectively, of newly added claims 18 and 19 respectively, and of original claims 2-11 and 16-17 respectively is now offered for review under the circumstances stated above, starting on the immediately following page.

1. (Currently Amended): A genetically modified human microglia cell which can be maintained as a stable, substantially homogeneous cell line in-vitro, said genetically modified cell comprising:

a ~~modified~~ microglia cell of human origin which is stable when maintained in culture and which

- (i) has demonstrable phagocytic properties;
- (ii) produces substantially homogenous progeny continuously while maintained in culture;
- (iii) presents at least CD11b and CD68 as surface antigens;
and
- (iv) contains human genomic DNA which has been
genetically modified to include a viral vector carrying
at least one DNA segment encoding an exogenous
gene for intracellular expression.

2. (Original): The genetically modified human microglia cell as recited in claim 1 wherein said viral vector is an amphotropic retroviral viral vector.

3. (Original): The genetically modified human microglia cell as recited in claim 1 wherein said viral vector includes as exogenous DNA sequence encoding a v-myc gene.

4. (Original): The genetically modified human microglia cell as recited in claim 1 further comprising the presence of the surface antigen RCA-lectin;

5. (Original): The genetically modified human microglia cell as recited in claim 1 further comprising the presence of P_{2Y1} receptors.

6. (Original): The genetically modified human microglia cell as recited in claim 1 further comprising the presence of the surface antigens HLA-ABC (MHC class I); and HLA-DR (MHC class II).

7. (Original): The genetically modified human microglia cell as recited in claim 1 wherein said cell expresses at least one active substance selected from the group consisting of cytokines and chemokines.

8. (Original): The genetically modified human microglia cell as recited in claim 6 wherein said expressed active substance is selected from the group consisting of MIP-1 β , MCP-1, IL-1 β , IL-6, IL-8, IL-12, and IL-15.

9. (Original): The genetically modified human microglia cell as recited in claim 1 wherein said cell is in a non-stimulated state.

10. (Original): The genetically modified human microglia cell as recited in claim 1 wherein said cell is in a stimulated state.

11. (Original): The genetically modified human microglia cell as recited in claim 10 wherein said stimulated cell overexpresses at least one pharmacologically active composition selected from the group consisting of cytokines and chemokines.

12. (Currently Amended): The genetically modified human microglia cell as recited in claim ~~±~~ 18 wherein said cell is utilized for the screening of compounds useful against an ~~for the treatment of~~ autoimmune disease.

13. (Currently Amended): The genetically modified human microglia cell as recited in claim ~~±~~ 19 wherein said cell is utilized against ~~for the treatment of~~ a neurodegenerative disorder.

14. (Currently Amended): The genetically modified human microglia cell as recited in claim ~~±~~ 19 wherein said cell is utilized against ~~for the treatment of~~ at least one pathology selected from the group consisting of Alzheimer disease, Parkinson disease, Huntington disease, amyotrophic lateral sclerosis, stroke, spinal cord injuries, and ataxia.

15. (Currently Amended): A method for transforming human microglial cells into a genetically modified cell line, said method comprising

- obtaining human microglial cells;
- culturing said human microglial cells;
- transfecting said cultured human microglial cells using a viral vector encoding at least an oncogene; and
- expanding said transfectants in culture media as an immortalized, substantially homogeneous cell line.

16. (Original): The method as recited in claim 15 wherein said oncogene is the v-myc oncogene.

17. (Original): The method as recited in claim 15 wherein said viral vector is an amphotrophic replication incompetent retroviral vector.

18. (New): The genetically modified human microglia cell as recited in claim 1 wherein said cell is utilized in-vitro.

19. (New): The genetically modified human microglia cell as recited in claim 1 wherein said cell is utilized in-vivo.